

10/539722
JC17 Rec'd PCT/PTO 20 JUN 2005

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) An aluminum alloy for heat exchanger tubing comprising: 0.4 to 1.1% by weight manganese[,]; up to 0.01% by weight copper[,]; up to 0.05% by weight zinc[,]; up to 0.2% by weight iron[,]; up to 0.2% by weight silicon[,]; up to 0.01% by weight nickel[,]; up to 0.05% by weight titanium[,]; and the a balance of aluminum and incidental impurities, wherein said alloy ~~has been~~ is homogenized at a temperature of between 580 and 620°C and extruded into tubing and brazed.
2. (Original) Brazed extruded heat exchanger tubing formed from an aluminum alloy comprising 0.4 to 1.1% by weight manganese, up to 0.01% by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by weight silicon, up to 0.01% by weight nickel, up to 0.05% by weight titanium and the balance aluminum and incidental impurities.
3. (Currently Amended) A brazed heat exchanger assembly comprising: joined extruded heat exchanger tubes comprising a first aluminum alloy comprising 0.4 to 1.1% percent by weight manganese, up to 0.01% by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by weight silicon, up to 0.01% by weight nickel and a balance of aluminum and incidental impurities; and heat exchange fins, wherein the tubes are extruded tubes formed of a first aluminum alloy comprising 0.4 to 1.1% percent by weight manganese, up to 0.01% by weight copper, up to 0.05% by weight zinc, up to 0.2% by weight iron, up to 0.2% by weight silicon, up to 0.01% by weight nickel and the balance aluminum and incidental impurities and the fins are formed of a comprising a second aluminum alloy selected from the group consisting of an alloy comprising 0.9 to 1.5% by weight manganese, and an alloy of the AA3003 type, and said second aluminum alloy further containing at least 0.5% by weight zinc, whereby wherein the brazed tubes exhibit good self corrosion protection and the fins are galvanically sacrificial relative to the tubes.
4. (Currently Amended) A brazed heat exchanger assembly according to claim 3, wherein the difference between the manganese weight percent content of the first aluminum alloy is related to the manganese weight percent content of the second aluminum alloy by the formula

$$Mn_{tube} (\text{wt\%}) > Mn_{fin} (\text{wt\%}) - 0.8 \text{ wt\%}$$

where Mn_{tube} is the manganese weight percent content of the first aluminum alloy and Mn_{fin} is the manganese weight percent content of the second aluminum alloy.

5. (Currently Amended) A brazed heat exchanger assembly according to claim 3, or 4 wherein the second aluminum alloy contains further comprises less than 0.05% by weight copper.
6. (Currently Amended) A brazed heat exchanger assembly according to claim 3, 4 or 5 where a the galvanic current from fin to tube is greater than +0.05 microamps per square centimeter.

7. (Currently Amended) A brazed heat exchanger assembly according to any one of claims 3, to 6 wherein the manganese weight percent of the first aluminum alloy contains is between 0.6 and 1.19% by weight manganese.

8. (Currently Amended) A brazed heat exchanger assembly according to claim 7 where the manganese weight percent of the first aluminum alloy is contains between 0.9 and 1.1% by weight manganese.